Claims

What is claimed is:

1. A method of managing input/output (I/O) configurations of a computing environment, said method comprising:

selecting a channel path from a plurality of channel paths to be used in adjusting an I/O configuration of said computing environment, said selecting being based on one or more characteristics associated with said channel path; and

dynamically adjusting said I/O configuration using the selected channel path.

2. The method of claim 1, wherein said dynamically adjusting comprises attaching the selected channel path to a subsystem of said I/O configuration.

3. The method of claim 2, wherein said selected channel path and said subsystem are associated with a workload executing within at least one logical partition of said computing environment, and wherein the dynamically adjusting provides additional resources to said workload.

4. The method of claim 3, wherein said selected channel path was removed from another workload executing within at least one logical partition, thereby reducing resources of said another workload.

5. The method of claim 1, wherein said dynamically adjusting comprises removing attachment of the selected channel path from a subsystem of said I/O configuration.

6. The method of claim 1, wherein said one or more characteristics include at least one of an impact on response time, an impact on response time to achieve specific workload goals, contention on a subsystem of said I/O configuration, availability characteristics of said channel path, and complexity of the resulting I/O configuration.

7. The method of claim 1, further comprising determining that said I/O configuration is to be adjusted.

8. The method of claim 7, wherein said determining comprises using one or more workload goals in making the determination.

9. The method of claim 8, wherein the one or more workload goals are associated with workloads of a group of partitions of said computing environment.

10. The method of claim 7, wherein said determining comprises consulting with one or more workload managers of said computing environment in making the determination.

11. The method of claim 7, wherein said determining comprises using measured subsystem performance being within an average target range in making the determination.

12. The method of claim 1, further comprising projecting an impact of the adjustment on one or more subsystems to be effected by the adjustment, prior to said dynamically adjusting.

13. The method of claim 12, further comprising dynamically adjusting when the impact is acceptable.

14. A system of managing input/output (I/O) configurations of a computing environment, said system comprising:

means for selecting a channel path from a plurality of channel paths to be used in adjusting an I/O configuration of said computing environment, the selecting being based on one or more characteristics associated with said channel path; and

means for dynamically adjusting said I/O configuration using the selected channel path.

15. The system of claim 14, wherein said means for dynamically adjusting comprises means for attaching the selected channel path to a subsystem of said I/O configuration.

16. The system of claim 15, wherein said selected channel path and said subsystem are associated with a workload executing within at least one logical partition of said computing environment, and wherein the dynamically adjusting provides additional resources to said workload.

17. The system of claim 15, wherein said selected channel path was removed from another workload executing within at least one logical partition, thereby reducing resources of said another workload.

18. The system of claim 14, wherein said means for dynamically adjusting comprises means for removing attachment of the selected channel path from a subsystem of said I/O configuration.

19. The system of claim 14, wherein said one or more characteristics include at least one of an impact on response time, an impact on response time to achieve specific workload goals, contention on a subsystem of said I/O configuration, availability characteristics of said channel path, and complexity of the resulting I/O configuration.

20. The system of claim 14, further comprising means for determining that said I/O configuration is to be adjusted.

21. The system of claim 20, wherein said means for determining comprises means for using one or more workload goals in making the determination.

22. The system of claim 21, wherein the one or more workload goals are associated with workloads of a group of partitions of said computing environment.

23. The system of claim 20, wherein said means for determining comprises means for consulting with one or more workload managers of said computing environment in making the determination.

24. The system of claim 20, wherein said means for determining comprises means for using measured subsystem performance being within an average target range in making the determination.

25. The system of claim 14, further comprising means for projecting an impact of the adjustment on one or more subsystems to be effected by the adjustment, prior to the dynamically adjusting.

26. The system of claim 25, further comprising dynamically adjusting when the impact is acceptable.

27. A system of managing input/output (I/O) configurations of a computing environment, said system comprising:

a processor adapted to select a channel path from a plurality of channel paths to be used in adjusting an I/O configuration of said computing environment, the selecting being based on one or more characteristics associated with said channel path; and

a processor adapted to dynamically adjust said I/O configuration using the selected channel path.

28. At least one program storage device readable by a machine, tangibly embodying at least one program of instructions executable by the machine to perform a method of managing input/output (I/O) configurations of a computing environment, said method comprising:

selecting a channel path from a plurality of channel paths to be used in adjusting an I/O configuration of said computing environment, said selecting being based on one or more characteristics associated with said channel path; and

dynamically adjusting said I/O configuration using the selected channel path.

29. The at least one program storage device of claim 28, wherein said dynamically adjusting comprises attaching the selected channel path to a subsystem of said I/O configuration.

30. The at least one program storage device of claim 29, wherein said selected channel path and said subsystem are associated with a workload executing within at least one logical partition of said computing environment, and wherein the dynamically adjusting provides additional resources to said workload.

31. The at least one program storage device of claim 30, wherein said selected channel path was removed from another workload executing within at least one logical partition, thereby reducing resources of said another workload.

32. The at least one program storage device of claim 28, wherein said dynamically adjusting comprises removing attachment of the selected channel path from a subsystem of said I/O configuration.

33. The at least one program storage device of claim 28, wherein said one or more characteristics include at least one of an impact on response time, an impact on response time to achieve specific workload goals, contention on a subsystem of said I/O configuration, availability characteristics of said channel path, and complexity of the resulting I/O configuration.

34. The at least one program storage device of claim 28, wherein said method further comprises determining that said I/O configuration is to be adjusted.

35. The at least one program storage device of claim 34, wherein said determining comprises using one or more workload goals in making the determination.

36. The at least one program storage device of claim 35, wherein the one or more workload goals are associated with workloads of a group of partitions of said computing environment.

37. The at least one program storage device of claim 34, wherein said determining comprises consulting with one or more workload managers of said computing environment in making the determination.

38. The at least one program storage device of claim 34, wherein said determining comprises using measured subsystem performance being within an averaged target range in making the determination.

39. The at least one program storage device of claim 34, wherein said method further comprises projecting an impact of the adjustment on one or more subsystems to be effected by the adjustment, prior to said dynamically adjusting.

40. The at least one program storage device of claim 39, wherein said method further comprises dynamically adjusting when the impact is acceptable.

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